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900 Series Protocol Guide for 2X and 2X-A Series Control Panels

P/N 00-3201-505-0403-04 • REV 004 • ISS 12MAY25

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Contact information and product documentation

For contact information or to download the latest product documentation, visit firesecurityproducts.com.

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Advisory messages

Advisory messages alert you to conditions or practices that can cause unwanted results. The advisory messages used in this document are shown and described below.

WARNING: Warning messages advise you of hazards that could result in injury or loss of life. They tell you which actions to take or to avoid in order to prevent the injury or loss of life.

Caution: Caution messages advise you of possible equipment damage. They tell you which actions to take or to avoid in order to prevent the damage.

Note: Note messages advise you of the possible loss of time or effort. They describe how to avoid the loss. Notes are also used to point out important information that you should read.

Introduction

Intended audience and purpose

This manual is intended for those trained and certified to install, program, and maintain 2X and 2X-A Series control panels. The purpose of this manual is to highlight the features and functions of the control panels that are specific to the 900 Series protocol.

For general information on topics not specific to the 900 Series protocol, see your control panel installation and operation manuals.

Firmware compatibility

Information in this document covers control panels with firmware version 3.5 or later. This document must not be used as a guide to installation, configuration, or operation of control panels with an earlier firmware version.

To check the firmware version of your control panel, see the Revision report in the Reports menu.

Product compatibility

Products compatible with these control panels are listed in the 900 Series product compatibility list. Only those products specified in the compatibility list are guaranteed to be compatible.

To download the latest product compatibility list, visit firesecurityproducts.com.

Installation

Registering the 2010-2-PAK-900

A 2010−2-PAK-900 Panel Activation Key (PAK) is required for each control panel that requires the 900 Series protocol.

Follow these steps to register or unregister the PAK. Installer level access is required.

To register the PAK:

1. Insert the PAK into either of the USB type A slots on the control panel main board.
2. On the control panel LCD, select Panel Setup, and then select Panel Activ. Key.

   The LCD displays two options: Register New PAK and Unregister PAK.
3. Select Register New PAK. The PAK information is displayed on the LCD. Confirm that the details are correct and press Continue.

   The PAK information includes: The PAK type, the PAK serial number, and the host control panel serial number (added when registration is complete).
4. Press Register, and then press Yes to confirm the registration.
5. Press Apply to apply the registration details to the panel, or Continue to register more PAKs for the same control panel.

To apply the 900 Series protocol:

1. Remove the PAK from the USB slot.
2. Insert a jumper onto JP4 on the control panel main board, and then restart the control panel.

   When the panel restarts, the System Update menu is displayed. This menu is only available in English.
3. Select Load 900 Series Protocol, and then press the jog dial to confirm the selection.
4. When the update is complete, remove the jumper from JP4, and then press Reboot to restart the control panel.

The control panel is now configured to use the 900 Series protocol and devices.

To unregister the PAK:

1. Insert the PAK into either of the USB type A slots on the control panel main board (see figure).
2. On the control panel LCD, select Panel Setup, and then select Panel Activ. Key.
3. Select Unregister PAK and follow the on-screen instructions.

To restore the default protocol:

1. Remove the PAK from the USB slot.
2. Insert a jumper onto JP4 on the control panel main board (see figure), and then restart the control panel.

   When the panel restarts, the System Update menu is displayed. This menu is only available in English.
3. Select Restore Default Protocol, and then press the jog dial to confirm the selection.
4. When the update is complete, remove the jumper from JP4, and then press Reboot to restart the control panel.

The control panel is now configured to use the default protocol and devices.

Connecting loop devices

Using the 900 Series protocol, each loop can support up to 126 devices (using the address range 1 to 126).

For detailed loop device installation information, see your device installation sheet.

Configuration

This section contains information specific to configuring your fire system for the 900 Series protocol. See your control panel installation manual for all other configuration information.

Note: Configuration options described here require Installer level access. The default password for the default installer user is 4444.

Detector configuration

Enabling a mounting base

Select the loop device configuration menu to enable a compatible mounting base and to disable the activation of the remote LED when the detector is in alarm. By default the mounting base is not enabled (the remote LED is activated when the detector is in alarm).

If enabled, the remote LED is only activated by output activation configuration or by rules programming in the Configuratioon Utility application.

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.
3. Select Base, and then select YES to enable the detector base.
4. Press F4 (Enter), and then press F1 (Back).
5. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

Configuring enhanced heat options

Select the loop device configuration menu to enable enhanced heat options for compatible CO detectors and multisensors. By default this option is disabled.

If enabled, a fire alarm detected by the device is reported to the control panel as a prealarm (instead of an alarm). The device is then polled every 60 seconds – if the temperature rises above the initial temperature plus the configured temperature gradient (in ºC), the alarm is reported to the control panel. After a configurable delay (in minutes), an alarm is reported regardless of the temperature state.

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.
3. Select and check E_Heat to enable the enhanced heat options.

4. Select T_Grad, and then enter the temperature gradient (in ºC).

   Possible values 1 to 20 (the default value is 5).
5. Select Aly_Dly, and then enter the configurable delay (in minutes).

   Possible values 1 to 10 (the default value is 10).
6. Press F4 (Enter), and then press F1 (Back).
7. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Sounder configuration

Assigning group addresses

Select the loop device configuration menu to assign a group address to control the simultaneous activation of compatible addressable sounders. By default the group address value is 0 (the simultaneous activation option is disabled).

Note: At least five compatible sounders are required in a loop to apply simultaneous activation. For loops with less than five sounders, devices are activated individually.

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.
3. Select act_grp, and then assign the required group address.

   For device types SDxG, SDx, and SCCx, the group address can be any number from 112 to 126 that is not already assigned as a device address.

   For device types DdG, SDd, SDBd, SDVBd, and SDVd, the group address can be any number from 1 to 15.
4. Press F4 (Enter), and then press F1 (Back).
5. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Automatically silencing sounders (noise pollution)

Select the loop device configuration menu to automatically silence compatible sounders 20 minutes after activation. By default this option is disabled (sounders continue to sound).

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.

3. Select and check NPollut to automatically silence compatible sounders 20 minutes after activation.
4. Press F4 (Enter), and then press F1 (Back).
5. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Performing walk tests

Select Sounders walk test to perform walk tests for compatible sounders using the optional magnetic wand accessory (not supplied).

To change the configuration:

1. Select Test from the Main menu, and then select Sounders walk test.
2. Select the loop where the sounders are located, and then press the jog dial to enable walk test mode for the loop.

   While the loop is in walk test mode, use the magnetic wand to locally test each of the loop sounders.
3. When you have finished, press the jog dial again to exit loop walk test mode.
4. Press F1 (Back) or F2 (Exit).

Adjusting the volume

Select Snd volume walk confg to locally set the volume level for compatible sounders using the optional magnetic wand accessory (not supplied).

To change the configuration:

1. Select Field setup from the Main menu, and then select Snd Vol Walk Confg.

   A list of compatible sounders displays, indicating the device address and current volume setting.

   Move from sounder to sounder and use the magnetic wand to manually adjust the volume to the required level.
2. When you have finished, press F4 (Enter), and then press F1 (Back).
3. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.

Wireless configuration

Enabling wireless communication

Select the loop device configuration menu to enable wireless communication for compatible wireless devices. By default this option is disabled.

To change the configuration:

1. Select Field setup from the Main menu, and then select Loop device config.
2. Select the corresponding loop and device.

   The loop device configuration menu displays.
3. Select and check Radio to enable wireless communication.
4. Press F4 (Enter), and then press F1 (Back).
5. Press F1 (Save), F3 (Apply), F4 (Discard), or F2 (Exit).

   Remember to apply saved settings from the Main menu.